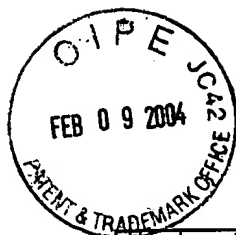


61

2-11-04

RICE  
2/11/04

Docket Number: NSC-P05052

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**Patent Application**

I hereby certify that this transmittal of the below described documents is being deposited with the United States Postal Service in an envelope bearing Express Mail Postage and an Express Mail label, with the below serial number, addressed to the Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450, on the below date of deposit.			
Express Mail Label No.:	EV375331857US	Name of Person Making the Deposit:	ANTHONY CHOU
Date of Deposit:	February 9, 2004	Signature of the Person Making the Deposit:	<i>Anthony Chou</i>

In re Application of: **Chen, Sean S.**

Serial No.: **09/970,297**

Examiner: **Cunningham, Terry D.**

Filed: **10/02/01**

Art Unit: **2816**

For: **LOW VOLTAGE, LOW Z, BAND-GAP REFERENCE**

**Mail Stop RCE**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

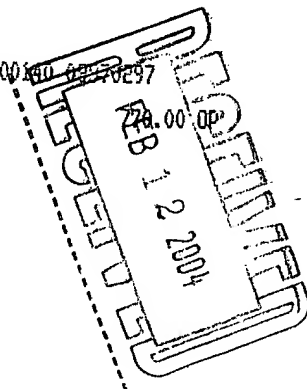
**REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL**  
**(SUBSECTION(B) OF 35 U.S.C. § 132)**

This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 for the above-identified application.

1. Submission required under a filing under 37 C.F.R. § 1.114

- a. ☐ Previously submitted
- i. ☐ Consider the amendment(s)/ reply under 37 C.F.R. § 1.116 previously filed on \_\_\_\_\_  
(Any unentered amendment(s) referred to above will be entered)
- ii. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_
- iii. ☐ Other \_\_\_\_\_
- b. ☒ Enclosed
- i. ☒ Amendment/Reply
- ii. ☐ Affidavit(s)/Declaration(s)
- iii. ☐ Information Disclosure Statement (IDS)
- iv. ☐ Other \_\_\_\_\_

02/12/2004 DTESSEM1 00000140 02-70297  
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2. Miscellaneous

- a. ☐ Suspension of action on the above-identified application is requested under 37 C.F.R. § 1.103(c) for a period of \_\_\_\_\_ months.  
(period of suspension shall not exceed 3 months: Fee under 37 C.F.R. § 1.17(l) required)

b. Other \_\_\_\_\_

### Extension of Term

3. The proceedings herein are for a patent application and the provisions of 37 C.F.R. 1.136 apply.

- (a) ☐ Applicant petitions for an extension of time under 37 C.F.R. 1.136 (fees: 37 C.F.R. 1.17(a)-(d) for the total number of months checked below:)

Extension	Fee
<input type="checkbox"/> one month	\$110.00
<input type="checkbox"/> two months	\$420.00
<input type="checkbox"/> three months	\$950.00
<input type="checkbox"/> four months	\$1,480.00

Fee \$ \_\_\_\_\_

If an additional extension of time is required, please consider this a petition therefor.

- (b) ☒ Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

### FEES DUE

The RCE fee under 37 C.F.R. § 1.17(e) is required by 37 C.F.R. § 1.114 when the RCE is filed.

CLAIMS					
	NO. OF CLAIMS		EXTRA CLAIMS	RATE	FEES
Basic Application Fee					\$770.00
Total Claims	18	Minus 20=	0	X \$18 =	\$
Independent Claims	3	Minus 3=	0	X \$86 =	\$
If multiple dependent claims are presented, add \$290.00					\$
<b>TOTAL APPLICATION FEE DUE</b>					<b>\$770.00</b>

### PAYMENT OF FEES

1. The full fee due in connection with this communication is provided as follows:
- ☒ The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No.: 23-0085.  
A duplicate copy of this authorization is enclosed.


- ☒ A check in the amount of \$ 770.00
- ☐ A check in the amount of \$ \_\_\_\_\_
- ☒ Charge any fees required or credit any overpayments associated with this filing to Deposit Account No.: 23-0085.

Please direct all correspondence concerning the above-identified application to the following address:

**WAGNER, MURABITO & HAO LLP**  
Two North Market Street, Third Floor  
San Jose, California 95113  
(408) 938-9060

Respectfully submitted,

Date: February 9, 2004

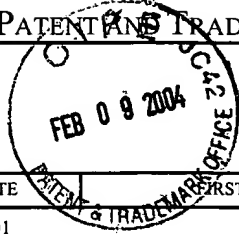
By:   
Reginald A. Ratliff  
Reg. No. 48,098



UNITED STATES PATENT AND TRADEMARK OFFICE

AK

UNITED STATES DEPARTMENT OF COMMERCE  
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Alexandria, Virginia 22313-1450  
www.uspto.gov



APPLICATION NO.	FILING DATE	INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,297	10/02/2001	Sean S. Chen	NSC-P05052	9656

7590 11/07/2003

WAGNER, MURABITO & HAO LLP  
Third Floor  
Two North Market Street  
San Jose, CA 95113

RECEIVED

NOV 10 2003

WMH

EXAMINER

CUNNINGHAM, TERRY D

ART UNIT PAPER NUMBER

2816

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

END



DOCKETED

Date: 11-11-03

Initials: 0

**Office Action Summary**



Application No.

09/970,297

Applicant(s)

CHEN, SEAN S.

Examiner

Terry D. Cunningham

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4,6-8,11-13,15-21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-8,11-13,15-21 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Summary of changes in this action***

1. Since claim 1 has been amended to recite the connection of the “pull-up device”, the New Matter rejection is hereby removed, since such is now attempting to refer to element 320. Applicant has now clarified that the recited “voltage pull-up device” is intending to refer to element 320. However, due to the new claim language, the issue is now being addressed as a rejection under the second paragraph of 35 U.S.C. § 112,

### ***Specification***

The amendment to the specification is hereby objected to because the amendment to the paragraph linking pages 13-14 now refer to a “reference circuit”. However, it is not clear what the “reference circuit” is referring to.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, there is no support found for the “voltage pull-up device” having the connections recited. As disclosed, the “voltage pull-up device” is part of the “band-gap reference circuit”, thus, it is not seen how it can be connected thereto. To overcome this, it is suggested that “circuit” in line 2, be changed to something such as --unit--. Note, similar correction would be required in line 5 and any corresponding occurrences in the dependent claims. This will clarify that the element recited in line 2 is part of the “band-gap reference circuit” of line 1, not the same thing.

Claims 2-4 and 6 are rejected for the reasons discussed above with claim 1.

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In claim 7, line 4, the phrase "low impedance" lacks relativity and is confusing.

Claims 8 and 11-13 are rejected for the reasons discussed above with claim 7.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-8, 11-13, 15-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadanka et al. (USPN 5,621,308) in view of newly cited art to Mietus (USPN 5,666,046). Kadanka et al. disclose, in Fig. 2, a circuit comprising: "a band-gap reference circuit (73)"; "a buffer circuit (54)"; and "a voltage pull-up device (70)", wherein the "voltage pull-up device" has a "transistors (48)". Kadanka et al. does not expressly disclose that transistor 46 has a "less than 1.0 V<sub>BE</sub>". However, it is notoriously well known, as expressly taught by Mietus (e.g., see Col. 1, lines 56-67), to use a voltage of 0.7 volts for the expect advantage of using a lower supply voltage (e.g., 0.8 volts). Therefore, it would have been obvious for one skilled in the art to manufacture transistor 48 with "less than 1.0 V<sub>BE</sub>" for the expected advantage allowing for a lower supply voltage.

Examiner has fully considered Applicant's remarks for the above rejection and has not found them to be persuasive. Applicant remarks that "the advantage of low impedance found in the claimed disposition is a result unexpected by Kadanka and Mietus". However, Applicant provides no reasons to support this accusation. Examiner refutes this statement and contends that since the combination of Kadanka and Mietus providing a regulated output, it will

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necessarily have "low impedance". Further, since the specification and claims fail to provide any specification definition for this phrase, "low impedance" would be given its broadest reasonable interpretation. Clearly, the combination of Kadanka and Mietus metes that broadest reasonable interpretation of "low impedance".

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 703-308-4872. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 703-308-4876. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0956.

TC  
November 5, 2003

**Terry D. Cunningham**  
**Primary Examiner**  
**Art Unit 2816**